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Proposal Title:
Examining the Relationship between Applicant Reactions and Selection Test Performance: Is the Relationship Curvilinear?

Proposal Abstract:

There is evidence in the literature that negative reactions to employee selection procedures such as high anxiety and low motivation are related to poor performance by job applicants on a selection test (McCarthy, Van Iddekinge, Lievens, Kung, Sinar, Campion, 2013). However, to date the studies examining this relationship were correlational, meaning that no causal relationship could be established. This implies that while it is possible that negative reactions predict low test performance, it is also plausible that the reverse is true (i.e., poor performance at the early stages of a selection test leads to high anxiety and low motivation) or a third variable is responsible for the observed relationship. In addition, there is evidence that the relationship between stress and performance is not linear but in the shape of an inverse U (Muse, Harris, & Field, 2003; Srivastava & Krishna, 1991), suggesting that extremely negative and extremely positive reactions lead to lower levels of performance while test performance is maximized at moderate levels of positive or negative reactions

Accordingly, the proposed study will examine the relationship between applicant anxiety and performance on a selection test. We hypothesize that there will be a curvilinear relationship between applicant anxiety and performance that is mediated by self-regulatory processing and off-task cognition. In order to establish causality, an experimental design will be utilized such that the level of anxiety participants face during the study will be manipulated through tailored instructions designed to evoke different levels of stress. After manipulating anxiety, participants will then complete a selection test. Random assignment to these anxiety conditions and a low level of test difficulty will ensure that the level of ability and self-efficacy on the task will be controlled for. The results of this study will allow for a more robust test of the relationship between applicant anxiety during selection procedures and test performance, and hence provide theoretical and practical implications for staffing researchers and practitioners.

Project Summary:

Past research examining the relationship between applicant reactions and selection test performance has largely consisted of correlational studies that suggest a linear relationship between applicant reactions and performance (McCarthy, Van Iddekinge, Lievens, Kung, Sinar, Campion, 2013). However, some researchers have suggested a curvilinear relationship between reactions and performance in the shape of an inverse U (Muse, Harris, & Field, 2003; Srivastava & Krishna, 1991). This framework has been proposed in several correlational studies but has seldom been tested in an experimental design. In this study, we will be examining the causal relationship between applicant anxiety and performance on a selection test. We propose a curvilinear model of anxiety and selection test performance based on the Comprehensive Theory of Workplace Anxiety (Cheng & McCarthy, 2018). Specifically, we hypothesize that there will be a curvilinear relationship between participant anxiety and their performance on a selection test. This theoretical model purports that very low and very high levels of anxiety will lead to poor performance on a selection test, while moderate levels of anxiety will maximize performance on a selection test. In addition to this, building off of the Resource Allocation Model (Kanfer & Ackerman, 1989), we will examine self-regulatory processing and off-task cognition as mediators of this relationship. Self-regulatory processing is defined in past literature as the ability to adjust and strengthen additional cognitive resources according to the demand of the task (Muraven & Baumeister, 2000). Off-task cognition is attention that is not directed to the task at hand (Kanfer & Ackerman, 1996). Based on our model, we hypothesize that self-regulatory processing will be positively correlated with selection test performance, while off-task cognition will be negatively correlated with selection test performance.

The participants in our study will be undergraduate students at Appalachian State University. These students will be a part of a pool of students who are eligible to receive extra credit for their participation in research. The study will be conducted through an online Qualtrics survey. Prior to their participation in the selection task, students will be asked to fill out a survey that will gather information about participant demographics and participant dispositional anxiety, measured using the State-Trait Anxiety Inventory (Spielberger et al., 1983). Before the selection test begins, we will use deception in the Qualtrics survey instructions in order to ensure that participants give adequate effort on the logical reasoning test. Participants will be told that the study is preliminary and that their score on the task will determine whether or not they will be eligible for the actual study, in which they will be paid $50/hr. Participants will be randomly assigned by Qualtrics to one of three anxiety conditions. In the high anxiety condition, participants will face two anxiety-inducing stimuli. First, they will be told that the task they are completing is a proven measure of how well they will perform in a real corporate job. Additionally, they will have a floating timer on the screen that will follow them as they move through the selection test. In the moderate anxiety condition, participants will be told that the task is somewhat correlated to corporate job performance and there will be a stationary timer at the top of the screen. Finally, in the low anxiety condition, participants will not be told anything about the implications of the task and there will not be a timer on the screen.

The selection test in this experiment will be a list of 60 thought-provoking sentences that the participant will put in alphabetical order as quickly as she can. Performance will be judged based on the amount of time it takes to complete the task and the accuracy of the

placement of each sentence. Following the completion of the task, participants will be asked to complete a survey in which their state anxiety, off-task cognition, and self-regulatory processing will be measured.

References

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